

REMARKS

The enclosed is responsive to the Examiner's Office Action mailed on July 1, 2004. At the time the Examiner mailed the Office Action claims 1-33 were pending. By way of the present response the Applicant has: 1) added no claims; 2) amended claims 4, 6-8, 10, 15, 17-19, 21, 26, 28-30 and 32; and 3) cancelled no claims. As such, claims 1-33 are now pending. The Applicant respectfully requests reconsideration of the present application and the allowance of all claims.

Drawing Objections

The Examiner objected to the Drawings because of informalities.

Applicants have submitted formal drawings to place them in proper condition for acceptance.

Claim Rejections

35 U.S.C. 112, second paragraph, Rejections

The Examiner rejected claims 4, 5, 10, 15, 16, 21, 26, 27 and 32 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants have amended claims 4, 10, 15, 21, 26 and 32 and these claims comply with 35 U.S.C. 112, second paragraph. Claims 5, 16 and 27 are also in compliance based on the claims on which they dependent being amended.

Applicants respectfully request the Examiner to remove these rejections.

35 U.S.C. 103(a) Rejections

The Examiner rejected claims 1, 2, 9, 12, 13, 20, 23, 24 and 31 under 35 U.S.C. 103(a) as being unpatentable over Aingaran, et al., U.S. Patent No. 6,536,022 (hereinafter "Aingaran") in view of Jin, et al., "A New Approach To Analyze Interconnect Delays in RC Wire Models", IEEE, 1999, (hereinafter "Jin") and further in view of Kahng, et al., "Noise Models For Multiple Segmented RC Interconnects", IEEE, 26-28 March, 2001, (hereinafter, "Kahng").

In regards to independent claim 23, the Examiner states the phrase "means for modeling the victim net using two π -type resistor-capacitor (RC) circuits, including means for determining a coupling between the victim net and the aggressor" is met by Kahng. Page 5 of the office action mailed 07/01/04. Applicants respectfully disagree that Kahng discloses this limitation of claim 23. Kahng does not disclose a means for modeling the victim net using two π -type resistor-capacitor (RC) circuits, including means for determining a coupling between the victim net and the aggressor. In contrast, Kahng presents a 1- π and a 3- π model and transforms the parameters to meet its agenda. Kahng states:

To analyze the segmented configuration, the closest model would be a 3- π model as shown in Figure 3. Extending the model used in [4] in this way avoids the drawbacks of the 1- π model in Figure 2. However, the resulting analytical model, and analytical expressions for noise and delay, become excessively complicated. Our approach, therefore, is to transform the parameters of the segmented configuration into the existing simplistic and fast model of [4] (Figure 2). In this section, we present the transformations that we use to reduce the input circuit (Figure 1) to the 1- π model (Figure 2).

(Page 147, Col. 1, Para 3)

The above language does not disclose the use of two π -type RC circuits, but rather one or three π -type models. Kahng is completely silent in regards to implementing two π -type RC circuits. Hence, Kahng fails to disclose this limitation of claim 23.

Applicants respectfully submit that Aingaran and Jin also fail to disclose a means for modeling the victim net using two π -type resistor-capacitor (RC) circuits, including means for determining a coupling between the victim net and the aggressor as claimed in claim 23. As such, the combined teachings of Aingaran, Jin and Kahng fail to disclose each and every limitation of independent claim 23. Hence, Aingaran, Jin and Kahng do not make claim 23 obvious under 35 U.S.C. §103(a).

Independent claims 1 and 12 contain substantially the same limitations as discussed above in regards to independent claim 23. As such, Aingaran, Jin and Kahng also fail to disclose each and every limitation of independent claims 1 and 12. Hence, the combination of Aingaran, Jin and Kahng do not make independent claims 1 and 12 obvious under 35 U.S.C. §103(a).

Dependent claims 2-5, 9-11, 13-16, 20-22, 24-27 and 31-33 all depend on and include the limitations of independent claims 1, 12 and 23 respectfully. Hence, the combination of Aingaran, Jin and Kahng also fail to make claims 2-5, 9-11, 13-16, 20-22, 24-27 and 31-33 obvious under 35 U.S.C. §103(a).

Allowable Subject Matter

Examiner stated that claims 6-8, 17-19 and 28-30 would be allowed if rewritten in independent form. Applicants thank the Examiner and have rewritten claims 6-8, 17-19 and 28-30 in independent form.

In light of the comments above, the Applicant respectfully requests the allowance of all claims.

Comments

If there are any additional charges, please charge Deposit Account No. 02-2666. If a telephone interview would in any way expedite the prosecution of this application, the Examiner is invited to contact Michael J. Mallie at (408) 720-8300.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Dated: _____

10/1/04



Michael J. Mallie
Reg. No. 36,591

12400 Wilshire Blvd.
Seventh Floor
Los Angeles, CA 90025-1030
(408) 720-8300

Amendments to the Drawings:

The attached sheets include submission of formal drawings for Figures 1-5. No changes have been made other than clearly labeling the figure numbers.